

Special Issue

Investigation, Optimization, and Discussion of Turbulence

Message from the Guest Editors

Turbulence is often cited to be the last unsolved problem of classical mechanics due to its enormous complexity, emerging from the interactions of many coherent structures of different length scales and strengths. The energy transfer occurring through scales is responsible for the appearance of structures larger than the initial scale of energy input and for the heat input caused by kinetic energy dissipation during the turbulence decay process. Although this topic is very old, has been deeply studied over the centuries, and its detailed mechanisms are already understood, the prediction of turbulence behaviour under some specific conditions still needs to be experimentally or numerically analysed. Turbulence plays a very important role in energy production in areas from wind turbines through to heat exchangers, component cooling mechanisms, steam turbines, and pipe-flows. It also has effects on meteorology and the climate. Please accept this invitation to collect new observations, experiments, calculations, and theories in this Special Issue of *Energies*. For this, we invite experimenters, theoreticians, and numericians.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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